PARAPHROSYLUS PRAEDATOR AND P. NIGRIPENNIS, NEW TO WASHINGTON, WITH NOTES ON THE GENUS (DIPTERA: DOLICHOPODIDAE)^{1,2}

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ABSTRACT: Adult *Paraphrosylus praedator* (Wheeler), *P. nigripennis* (Van Duzee), and *P. direptor* (Van Duzee) were collected from Freshwater Bay, Clallam County, Washington, This represents the first report of *P. praedator* and *P. nigripennis* occurring within the state. Habitat preferences of the 3 species are described.

Paraphrosylus Becker, originally proposed as a subgenus of Aphrosylus Haliday (Becker 1922) later considered a synonym of Aphrosylus (Foote et al., 1965; Cole 1969) is presently considered a valid genus (Robinson and Vockeroth 1981). Paraphrosylus contains 8 species (Van Duzee 1924; Harmston 1951, 1952) found in the western Nearctic region. Collection of adult Diptera, at low tide, from a beach in Freshwater Bay, 22.5 km west of Port Angeles, Clallam County, Washington on 23 May 1981 yielded 3 species of Paraphrosylus. Six males and 6 female Paraphrosylus praedator (Wheeler), 4 male and 3 female adults of P. nigripennis (Van Duzee), and 4 male and 3 female adults of P. direptor (Van Duzee) were collected. The finding of P. praedator and P. nigripennis represents new records for Washington state.

Prior collection records for *P. praedator* list various California locations from La Jolla in the south to Bodega Bay in the north (Wheeler 1897; Cole 1969) and Departure Bay in British Columbia (Saunders 1928). *P. nigripennis* has been recorded from Seaward, Alaska (Van Duzee 1924) and Waldport, Oregon (Cole 1969). Cole incorrectly indicated Waldport as being in Washington. *P. direptor* has been collected from Pacific Grove in California, and Ilwaco, Pacific County, Washington (Cole 1969). Specimens of the latter two species, in the James Entomological Collection at Washington State University, are from Seaview, Pacific County, Washington (Fig. 1).

Adults were collected during low tide, between 1000 and 1130 hours, by sweep netting close to the shaded regions of rocks covered with *Fucus*

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sp. This alga is found in abundance along the beach (Fig. 2). Adults seemed to congregate only about the *Fucus*, since intensive sweeps and disturbance of other beach debris and seaweed wrack yielded only coelopid and ephydrid adults. This may be an indication that members of *Paraphrosylus* prefer to congregate on and may be attracted to *Fucus*.

Wheeler (1897) and Saunders (1928) described the larvae and pupae of *P. praedator*, and indicated that the immatures were found in the algae growing on beach rocks. A thorough search of the *Fucus* at Freshwater Bay failed to provide immatures, but continued investigations should eventually result in other life stages of these species being found here.



Fig. 1. Collection localities of Paraphrosylus in Washington, Oregon and California.



Fig. 2. Specific collection sites of *Paraphrosylus* from shaded portions of *Fucus* covered rocks (arrows).

LITERATURE CITED

Becker, T. 1922, Dipterologishe Studien. Dolichopodidae. B. Nearktische und neotropische Region. Zool. - Bot. Gessel, Wien, Abhandl. 13: 1-394.

Cole, F.R. 1969. The flies of western North America. Univ. Calif. Press: Berkeley, 693 p.
Foote, R.H., J.R. Coulson, and H. Robinson, 1965. Family Dolichopodidae. p. 482-530.
In: A. Stone et al. A catalog of Diptera of America North of Mexico. USDA Agr. Hndbk. 276. 1969 p.

Harmston, F.C. 1951. New species of Dolichopodidae from California and Utah (Diptera). Great Basin Nat. 11: 11-17.

Robinson, H. and J.R. Vockeroth. 1981. Dolichopodidae. p. 625-639. *In:* J. McAlpine et al. A manual of the Nearctic Diptera. Vol. 1. Biosystematics Research Institute, Monogr 27. Ottawa. 674. p.

Saunders, L.G. 1928. Some marine insects of the Pacific coast of Canada. Ann. Ent. Soc. Am. 21: 521-545.

Van Duzee, M.C. 1924. North American species of *Paraphrosylus Becker*, a subgenus of *Aphrosylus Walker*, Pan-Pac. Ent. 1: 73-78.

Wheeler, W.M. 1897. A genus of maritime Dolichopodidae new to America. Proc. Cal. Acad. Sci. Ser. 3. 1: 145-152.